



Administrative Procedure

WMP-370, Section 1.19

Waste Acceptance Review for the Radioactive Waste Shipped Off the Hanford Site

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<h2>Administrative Use</h2>

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1.0 INTRODUCTION

1.1 Purpose

This procedure describes the Waste Support Services (WSS) review and approval process, records keeping, and shipment activities to ship radioactive waste to facilities located off the Hanford site.

1.2 Scope

This procedure applies to WSS personnel involved in all radioactive waste shipments to facilities located off the Hanford site, including other U.S. Department of Energy (DOE) sites and privately owned commercial facilities.

1.3 Applicability

Waste shipments to the Waste Isolation Pilot Plant (WIPP), Advanced Mixed Waste Treatment Project (AMWTP), and shipments of Special Nuclear Material (SNM) are exempt from this procedure.

1.4 Implementation

Procedure is effective upon implementation.

2.0 RESPONSIBILITIES

2.1 WSS Team Lead

- 2.1.1 Ensures that the offsite facility checklist is properly maintained and appropriate criteria is being documented and reviewed.
- 2.1.2 Ensures the Offsite Treatment, Storage, and Disposal Representative (OTSDR) has appropriate tools to perform the daily task for moving waste offsite.

2.2 Waste Management Representative

This responsibility applies to any Waste Management Representative (WMR) activities associated with offsite shipments of radioactive waste.

- 2.2.1 Interface with the assigned facility to ensure waste destined for offsite shipment is packaged compliantly in accordance with 49 Code of Federal Regulations (CFR), *Transportation*.
- 2.2.2 Ensures the radioactive waste data in the Solid Waste Information Tracking System (SWITS) is correct and coded in accordance with WMP-370, Section 5.1, *SWITS Data Entry for Waste*, as applicable for the receiving facility.
- 2.2.3 Resolves all waste container deficiencies and communicate updates and changes to the OTSDR.

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2.3 Offsite Treatment, Storage, and Disposal Representative

- 2.3.1 Ensures the receiving facility is a DOE site or the receiving private commercial site is authorized by the DOE field office to receive the waste pursuant to DOE M 435.1-1, *Radioactive Waste Management Manual*, Chapter I, Section F(4). If authorization is not in place, assists the CH2M HILL Plateau Remediation Company (CHPRC) Buyer's Technical Representative (BTR) to ensure that 435.1 authorization is obtained.
- 2.3.2 Develops and maintains waste acceptance checklist for each receiving offsite facility as required by this procedure.
- 2.3.3 Notifies the receiving facility of the potential hazards associated with packages being sent to the facility, and document the notification.
- 2.3.4 Acquires authorization to perform work and ensure the appropriate funding is available to manage waste being treated from assigned BTR.
- 2.3.5 Maintains a file of approved profiles or equivalent documentation for each offsite facility.
- 2.3.6 Obtains sufficient data about the waste to ensure that the waste meets the receiving offsite facility acceptance requirements.
- 2.3.7 Ensures the radioactive waste data in the SWITS is correct and coded in accordance with WMP-370, Section 5.1, as applicable, ensuring compliant storage within Solid Waste Operating Complex (SWOC) facilities.
- 2.3.8 Ensures the waste owner has an approved offsite facility waste profile or equivalent document describing the waste and that the waste was generated, designated, classified, packaged, and managed as specified in the waste profile.
- 2.3.9 Completes the applicable portions of the Waste Acceptance Checklist, and identifies any specialty reviews or issues requiring resolution.
- 2.3.10 Resolves all waste container deficiencies.
- 2.3.11 Provides the container documentation to the applicable offsite Treatment, Storage and Disposal (TSD) unit acceptance representative for completion of the waste acceptance review.
- 2.3.12 Communicates approval, status, issues, and schedule information with the waste owner.

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2.4 OTSDR Technical Reviewer

- 2.4.1 Ensures completion of all review steps and documentation required by this procedure.
- 2.4.2 Ensures that radioactive wastes approved for acceptance at an offsite facility meets the applicable waste acceptance requirements.
- 2.4.3 Communicates issues connected with waste receipt by the offsite facility with WMR and waste owner.

2.5 Transportation Logistics Services (TLS)

- 2.5.1 Ensures transportation documentation is compliant with Department of Transportation (DOT) regulations.

2.6 Waste and Fuels Management Project (WFMP) Production Control (PC)

- 2.6.1 Ensures the scheduling of shipments and other activities that support the success of making an offsite shipment are completed.
- 2.6.2 Ensures the scheduling of activities that ensure the safe and compliant conditions of the SWOC facility are completed.

3.0 PROCESS**3.1 General**

NOTE: *Radioactive waste shall be properly identified per applicable regulations, receiving facility requirements, and waste owner requirements which may include:*

- *Radioactive waste classification per DOE O 435.1*
- *Nuclear Regulatory Commission (NRC) in accordance with 10 CFR 61.*
- *Determination of status under the Resource Conservation and Recovery Act of 1976 (RCRA) and Toxic Substances and Control Act of 1976 (TSCA)*
- *Determination of Land Disposal Restrictions (LDR) status*
- *Shipping and packaging requirements under U.S. DOT regulations in accordance with 49 CFR.*
- *Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA).*

- 3.1.1 WSS determines the acceptability of waste for shipment by reviewing the information about a container and its contents. These data are reviewed against the applicable offsite facility requirements, contract or agreement provisions with the offsite facility, and requirements for shipping waste under DOT, CERCLA, RCRA, and/or TSCA.

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- 3.1.2 The application of requirements per this procedure will vary depending on where the waste originates and if the waste is radioactive. Waste originating from CHPRC facilities will employ waste designation, LDR notification/certification, and shipping procedures embodied in WSS procedures (WMP-370). Waste originating from non-CHPRC facilities may employ their own procedures for waste designation, shipping, etc.
- 3.1.3 Radioactive waste is tracked using SWITS.
- 3.1.4 The OTSDR or WMR shall ensure funding or commitment of funding from the waste owner before work is initiated to ship the waste. The funding will cover WSS personnel time, shipment, treatment, storage, and disposal costs applicable to the waste.
- 3.1.5 The OTSDR confirms that the contracted offsite entity that receives unvented Mixed/Low Level Waste (M/LLW) packages from SWOC facilities has been informed of potential hazards associated with these packages (e.g., volatile organic compound [VOC] gas build-up in the package headspace) and to share information on the respective controls that SWOC has employed to ensure worker safety (e.g., restraining devices and non-sparking tools). For new contracts, informing the contracted entity shall be done in writing at the time of contract award and a copy of the correspondence placed in the contract record file. Unvented Treatment, Storage, or Disposal Facility (TSDF) accepted LLW drums may be shipped offsite for treatment provided that the contracted offsite entity has been notified of the potential hazards and controls established by SWOC to ensure worker safety. **[TSR SAC 5.6.4.c]**
- 3.1.6 Upon completion of data entry for newly generated waste into SWITS, the WMR is required for passing all the edit checks. Once a shipment review is completed and the record passes all edit checks in SWITS, the WMR is responsible to perform a request to ship in SWITS. The OTSDR will continue to place the identified containers on an offsite shipment.
- 3.1.7 TLS is responsible for interfacing with the facility and ensuring that the waste package is DOT-compliant.

3.2 Pre-shipment Preparation Activities

- 3.2.1 The OTSDR prepares a profile or equivalent document and obtains approval of the waste stream from the applicable offsite facility. The OTSDR provides a copy of the approved profile to the OTSDR-Technical Reviewer.
- 3.2.2 The OTSDR maintains a file of approved profiles or other documentation used by the offsite facility to describe and approve a waste stream (the file of offsite facility profiles is not record material).

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- 3.2.3 The OTSDR prepares and maintains a waste acceptance review checklist specific to each offsite facility. Working copies of the Waste Acceptance Checklists are available from: <http://prc.rl.gov/rapidweb/WFMP/index.cfm?pagenum=111>. The review checklist will include requirements and constraints that apply to shipping radioactive waste to the offsite facility and shall consider the following:
- Contract provisions that identify limits on the waste and waste conveyance, e.g., size, dose rate, waste classification limits
 - RCRA hazardous waste shipping and facility permit waste acceptance requirements
 - US NRC license or safety basis documentation requirements
 - TSCA authorizations
 - Air permit requirements
 - Water permit requirements
 - DOT requirements
 - Other requirements that affect the shipment to and receipt of waste by the offsite facility
 - CERCLA

The checklist will clearly identify containers for which the review is being performed by the OTSDR and the OTSDR Technical Reviewer.

3.3 Review Waste for Acceptance at Offsite Facility

- 3.3.1 The OTSDR determines the status of the waste under RCRA, TSCA, CERCLA, NRC (10 CFR 61.55), and/or DOE Order (DOE O) 435.1. CHPRC-originating waste shall be designated and LDR notifications and certifications shall be prepared per WMP-370, Section 2.12, *Waste Stream Designation Process*, and Section 2.28, *Completing Land Disposal Restriction Notifications and Certifications*, or, if past practice waste, per an equivalent process and classified per DOE O 435.1 as low-level, transuranic, or high level waste. For non-CHPRC waste, the OTSDR may classify, designate, and determine LDR notifications and certifications are prepared per WMP-370, Sections 2.12 and 2.28, and DOE O 435.1, or they may obtain the information from the waste owner.

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- 3.3.2 The OTSDR, for newly generated and previously accepted radioactive waste, ensures the waste data in SWITS is correct and in accordance with WMP-370, Section 5.1, as applicable, ensuring compliant storage within SWOC facilities.
- The following changes in SWITS records for waste that is *“previously accepted waste,” TSD facility-received waste, and waste in TSDR status* will require notifications to be made and may require a change to the waste record as described in subsequent bullets:
 - Flash point, pH, reactivity, or physical state
 - NFPA flag
 - Storage category
 - Waste description
 - Hazardous waste components
 - Radionuclides and activity
 - Container type
 - Volume (container size)
 - Waste category flags (LLW, TRU, DW, TSCA)
 - Thermal power
 - Vent status
 - Dangerous waste codes
 - Labpack flag
 - Waste weight
 - All TSCA tab fields
 - In addition, any change to what is needed to compliantly store and handle that waste will also require notification to affect organizations within SWOC facility. Before making these changes in SWITS, the OTSDR must provide written notice to SWOC Operations and Work Control and Maintenance via inter facility transfer worksheet per WMP-370, Section 2.36, *Process to Inform SWOC Operations of a Label Change*.
 - If the updates to SWITS of previously accepted waste results in waste record (e.g., Package Identification Number (PIN) file) changes, submit addendums to the waste record to document these changes per WMP-370, Section 1.23, *Addendums to PIN Files*. An addendum can be generated on a container by container basis to document SWITS changes, or a larger basis such as a shipment number/batch. The addendum should address the main or basic reasons for the PIN file change and the date(s) of the change(s).
- 3.3.3 The OTSDR identifies a waste shipment by assigning a shipment number to a list of containers constituting one shipment and, at a minimum, record the waste volume, waste weight, container type, and number of containers for each shipment. For radioactive waste shipments, the shipment and shipment number shall be entered in SWITS by the OTSDR.
- 3.3.4 The OTSDR assembles information on the waste container to perform the acceptance review process recording the results on the OTSDR section of waste acceptance checklist governing the receiving offsite facility.

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- 3.3.5 The OTSDR records the acceptance review in accordance with instructions provided per Subsection 3.5.
- 3.3.6 Upon completion of the OTSDR acceptance review, the OTSDR provides the checklist and assembled data to the OTSDR-Technical Reviewer that will perform a technical review of the waste acceptance.
- 3.3.7 Utilizing the information package and checklist prepared by the OTSDR, the OTSDR-Technical Reviewer reviews each container for acceptance per the offsite facility requirements.
- 3.3.8 The OTSDR-Technical Reviewer records the acceptance review in accordance with instructions provided per Subsection 3.5.
- 3.3.9 Upon completing the review, the OTSDR-Technical Reviewer transfers the checklist to TLS for retention as part of the shipment file.

3.4 Ship Waste to Offsite Facility

- 3.4.1 The OTSDR prepares and submits a pre-shipment notification (or other authorization document as required by the offsite facility) for approval to the offsite facility. Approval of the pre-shipment notification or other authorization document shall be received prior to shipping the waste to the offsite facility.
- 3.4.2 For federally-regulated mixed waste, the OTSDR provides the LDR notification to the receiving facility.
- 3.4.3 The Shipper prepares documents for transportation in accordance with 49 CFR and other forms, such as NRC 540/541 forms, Uniform Hazardous Waste Manifest (UHWM), and other attachments associated with the UHWM, as required by the receiving offsite facility. Copies of these forms will be retained in records.

NOTE: *Once the OTSDR has submitted shipment information to the shipper for document preparation, the OTSDR will notify TLS for any changes that result in a change in transportation (e.g., labeling, removing or adding containers, etc.)*

- 3.4.4 The OTSDR prepares a shipment information file that identifies the general, chemical, packaging, and radiological data. This information is queried out of the SWITS database through a Microsoft office product (e.g., Microsoft Excel or Microsoft Access). The file contains, at a minimum, worksheets labeled as follows: GEN, HAZ, PAC, and RAD.
- 3.4.5 The CHPRC TLS obtains DOE-Headquarters (DOE-HQ) permission to ship waste offsite.

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NOTE: *Waste originating from non-CHPRC facilities may be shipped using the TLS as described in Subsection 3.4.7, or in accordance with facility procedures.*

- 3.4.6 If non-CHPRC facility procedures are used for the shipment, the WMR performs the following:
- Sends a completed *CHPRC Parts and Tools Return (PTR) Form* (Site Form A-6004-881) to the contract administrator prior to shipment.
 - Updates the status of containers in SWITS during and after shipment as required.
- 3.4.7 If TLS procedures are used or if the shipment originates from a CHPRC facility, the CHPRC TLS performs the following:
- Sends a completed PTR Form to the contract administrator prior to shipment.
 - Performs shipment to offsite facilities of radioactive waste originating from WFMP facilities in accordance with PRC-PRO-TP-157, *Offsite Hazardous Material Shipment*.
 - Updates the status of containers in SWITS during and after shipment.
- 3.4.8 The OTSDR will arrange for a Subsidiary Hazards Review for Class 7 Waste with D001, D002, or D003 or any U and P waste codes
- To ensure that all shipments are compliant with separation and segregation requirements required by the DOT table 49 CFR subpart C 177.848 and chemicals are compatible within each package, a review meeting shall be conducted that includes the CHPRC manager, the WMR staff, and the assigned shippers for all Class 7 waste shipments that have the waste codes of D001, D002, D003, or any U and P waste codes per the attached checklist. Working copies of the Subsidiary Hazards Review Checklist are available from:
<http://prc.rl.gov/rapidweb/WFMP/index.cfm?pagenum=111>
 - This review will also identify separation and segregation requirements for containers with individual subsidiary hazards requiring segregation on the vehicle.

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- 3.4.9 The TLS shall consider the DOT hazard classes assigned to the waste and, as necessary, discuss their review in a meeting using the following information:
- Results of an inspection of the containers assigned to the shipment conducted by the shipper.
 - The designation, LDR form, shipment information file, and waste profile description of the waste, which may be either specific to the shipment or general depending on the treatment facility requirements supplied by the WMR or generator.
 - The shipment papers and/or hazard class determination results drafted by the shipper.
- 3.4.10 The results of each review meeting, if required, shall be recorded by the CHPRC manager or designee on the Subsidiary Hazards Review Checklist.
- 3.4.11 When a review meeting is required and has been concluded and all applicable checklist items have been completed, the cognizant CHRPC Manager shall release the shipment. The WSS Team Lead or designee shall be responsible to communicate the shipment release to WFMP Production Control and other affected parties. The communication shall be in writing (e.g., email).

3.5 Completing Waste Acceptance Checklist

NOTE: *The Waste Acceptance Checklist identifies the applicable section(s) of the receiving facility requirements. By marking the item as acceptable, the reviewer certifies that the waste meets that section of the receiving facility requirements.*

- 3.5.1 Complete the "Yes" or "No" columns of the checklist using the following codes to document whether the waste meets the acceptance criteria:
- Place an "X" or check in the box in the "Yes" or "No" columns, or equivalent mark, to signify that the waste meets that particular acceptance criterion or set of criteria or not.
 - Place an "N/A" in the "Decision" column for items that are not applicable, such as asking for LDR status on a LLW container.
 - Circle or place an "R" in the "Yes" columns to signify that further review is required to determine whether the waste meets the acceptance criteria. If an "R" is used, the resolution of the issue must be documented in the Notes and Comments section on the last page of the checklist.
- 3.5.2 If the waste does not meet the acceptance criteria, document the problem in the Notes and Comments of the checklist.

4.0 FORMS*CHPRC Parts and Tools Return (PTR) Form, A-6004-881*

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5.0 RECORD IDENTIFICATION

All records are required to be managed in accordance with PRC-PRO-IRM-10588, *Records Management Processes*.

Records Capture Table

Name of Record	Submittal Responsibility	Retention Responsibility
Completed acceptance review checklists	Shipper	WSS Records Management
List of containers associated with shipment number		
Forms associated with shipment or that constitute acceptance by the offsite facility (e.g., RHF-31D, NRC 540/541, approved pre-shipment notification)		

6.0 SOURCES

6.1 Requirements

None

6.2 References

10 Code of Federal Regulations (CFR) 61, *Licensing Requirements for Land Disposal of Radioactive Waste*
 49 CFR, *Transportation*
 DOE M 435.1-1, *Radioactive Waste Management Manual*
 DOE O 435.1, *Radioactive Waste Management*
 HNF-15280, *Technical Safety Requirements for the Solid Waste Operations Complex (SWOC)*
 PRC-PRO-IRM-10588, *Records Management Processes*
 PRC-PRO-TP-157, *Offsite Hazardous Material Shipment*
 WMP 370, Section 1.23, *Addendums to PIN Files*
 WMP-370 Section 2.12, *Waste Stream Designation Process*
 WMP-370 Section 2.28, *Completing Land Disposal Restriction Notifications and Certifications*
 WMP-370, Section 2.36, *Process to Inform SWOC Operations of a Label Change*
 WMP-370 Section 5.1, *SWITS Data Entry for Waste*